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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,830	03/26/2001	Sangita R. Sharma	42390P10455	7805

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EXAMINER
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VO, HUYEN X

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 02/04/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/817,830

Applicant(s)

SHARMA ET AL.

Examiner

Huyen Vo

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 March 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/26/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5, 7-13, 15, 17-28, 30, and 32-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Shiau (US Patent Publication No. 2002/0091527).

1. Regarding claims 1 and 21, Shiau discloses an apparatus and a system comprising:

a server to couple to a client device having speech recognition functionality (figure 1), the client device and server being coupled through a network (via network 120 of figure 1); and

an acoustic model adaptor locatable at the server to adapt an acoustic model for the client device (section [0037]).

2. Regarding claims 11 and 26, Shiau discloses a method and a machine-readable medium having stored thereon instructions, which when executed by a machine, causes the machine to perform the following:

storing a copy of an acoustic model for a client device having speech recognition functionality (section [0041]);

receiving speech data from the client device (figures 6 or 7); and

adapting the acoustic model for the client device (section [0037]).

3. Regarding claim 36, Shiau discloses an apparatus comprising:

means for storing a copy of an acoustic model for a client device having speech recognition functionality (section [0041]); and

means for adapting the acoustic model for the client device based upon speech data received from the client device (section [0037]).

4. Regarding claims 2, 12, 22, 27, and 37, Shiau further discloses that the client device is a mobile computing device (101 of figure 1).

5. Regarding claim 3, Shiau further discloses that the server is coupled to the client device through a network (via network 120 of figure 1).

6. Regarding claims 5, 15, and 30, Shiau further discloses that the client device includes local memory to store extracted speech feature data (last 3 lines of section [0037], the word "storage" in the last line of this section inherently refers to client device memory).

7. Regarding claim 7, Shiao further discloses that the acoustic model adaptor of the server receives extracted speech feature data when there is a network connection between the client device and the server (section [0041]).

8. Regarding claim 8, 18, 23, 33, and 38, Shiao further discloses that the acoustic model adaptor of the server adapts the acoustic model for the client device based upon at least one of digitized raw speech data or extracted speech feature data received from the client device when there is a network connection between the client device and the server (sections [0029] and [0037]).

9. Regarding claims 9, 19, 24, 34, and 39, Shiao further discloses that the server stores the adapted acoustic model (sections [0036] and [0037]).

10. Regarding claims 10, 20, 25, 35, and 40, Shiao further discloses that the client device downloads and stores the adapted acoustic model (last 6 lines of section [0037] and section [0041]).

11. Regarding claims 13 and 28, Shiao further discloses that a server stores the acoustic model for the client device (section [0036]) and the client device couples to the server through a network such that the server receives the speech data from the client device (via network 120 of figure 1).

12. Regarding claims 17 and 32, Shiao further discloses that the speech data includes extracted speech feature data (section [0041]).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 6, 14, 16, 29, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiao (US. Patent Publication No. 2002/0091527) in view of Jochumson (US Patent No. 6453290).

13. Regarding claims 4, 14, and 29, Shiao fails to disclose that the client device includes local memory to store digitized raw speech data. However, Jochumson teaches that the client device includes local memory to store digitized raw speech data (col. 7, ln. 26-31). The advantage of using the teaching of Jochumson in Shiao is to allow the client device to store raw speech input for future processing.

Since Shiao and Jochumson are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shiao by incorporating the teaching of

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Jochumson in order to allow the client device to store raw speech input for future processing.

14. Regarding claim 6, Shiau further discloses that the acoustic model adaptor of the server receives speech data when there is a network connection between the client device and the server (section [0041]). Shiau fails to specifically disclose that the speech data is raw speech data. However, Jochumson teaches that the speech data is raw speech data (col. 5, ln. 1-60). The advantage of using the teaching of Jochumson in Shiau is to reduce processing time and power at the client device.

Since Shiau and Jochumson are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shiau by incorporating the teaching of Jochumson in order to reduce processing time and power at the client device.

15. Regarding claims 16 and 31, Shiau fails to disclose that the speech data includes digitized raw speech data. However, Jochumson teaches that the speech data includes digitized raw speech data (col. 7, ln. 26-31). The advantage of using the teaching of Jochumson in Shiau is to reduce processing time and power at the client device.

Since Shiau and Jochumson are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shiau by incorporating the teaching of Jochumson in order to reduce processing time and power at the client device.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. White et al. (US Patent No. 6408272), Bennett et al. (US Patent No. 6633846), and Barclay et al. (US Patent No. 5960399) teach that a client device is coupled to the server having speech recognition and model adapting functionalities that are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Vo whose email address is [huyen.vo@uspto.gov](mailto:huyen.vo@uspto.gov). The examiner can normally be reached on M-F, 9-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-306-0377.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Examiner Huyen X. Vo

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December 13, 2004

  
DORIS H. TO 2/2/04  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600